

**UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF NEW JERSEY**

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NASDAQ, INC. and NASDAQ TECHNOLOGY AB,	:	
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Plaintiffs,	:	Civil Action No. 18-3014-BRM-DEA
	:	
v.	:	<b>OPINION</b>
	:	
IEX GROUP, INC. and INVESTORS EXCHANGE, LLC,	:	
	:	
Defendants.	:	
	:	

Before this Court is Defendants IEX Group, Inc. and Investors Exchange, LLC's (collectively "IEX") Motion to Dismiss. (ECF No. 23.) Plaintiffs Nasdaq, Inc. and Nasdaq Technology AB (collectively "Nasdaq") oppose the Motion. (ECF No. 27.) Having reviewed the parties' submissions filed in connection with the Motion and having heard oral argument pursuant to Federal Rule of Civil Procedure 78(a) on December 19, 2018, for the reasons set forth below, and for good cause shown, the Motion is **GRANTED** in part and **DENIED** in part.

For the purpose of the Motion to Dismiss, the Court accepts the factual allegations in the Complaint as true and draws all inferences in the light most favorable to Nasdaq. *See Phillips v. Cty. of Allegheny*, 515 F.3d 224, 228 (3d Cir. 2008). Further, the Court also considers any “document *integral to or explicitly relied upon* in the complaint.” *In re Burlington Coat Factory Sec. Litig.*, 114 F.3d 1410, 1426 (3d Cir. 1997).

This matter arises from alleged patent infringements relating to electronic trading technologies. Nasdaq was the first electronic stock market. (ECF No. 1 ¶ 2.) Over the years, it has “evolved into a company that not only operates its own markets (*e.g.*, the Nasdaq Stock Market), but also provides technology to other market operators.” (*Id.*) Now, “Nasdaq provides mission-critical technology solutions that power more than a hundred market infrastructure organizations across the globe.” (*Id.* ¶ 3.) Nasdaq and its subsidiaries hold more than 250 patents in this area, seven of which are at issue in this case. (*Id.*) “IEX was founded in 2012, quickly developed the initial version of its electronic trading platform, and began operating the platform in 2013.” (*Id.* ¶ 4.)

Nasdaq is the assignee of U.S. Patent Nos. 7,647,264; 7,895,112; 7,933,827; 8,117,609; 8,244,622; 8,280,797; and 8,386,362 (collectively the “Patents-in-Suit”). (*Id.* ¶ 13.) Nasdaq alleges its technology played a central role in IEX’s electronic trading platform launch and operation because “at least four key technology employees left Nasdaq for IEX” in 2012 and 2013. (*Id.* ¶ 5.) All the former employees who left Nasdaq for IEX “were likely familiar with the four patented Nasdaq technologies at issue in this case: (1) closing auction processes, (2) multi-parallel order processing, (3) matching engine performance, and (4) data feed optimizations.” (*Id.* ¶ 6.) These former Nasdaq employees allegedly helped construct “the earliest version of IEX’s trading platform and continued to work on modifications thereafter.” (*Id.* ¶ 5.)

An example of IEX’s “unauthorized borrowing can be seen with respect to closing auction technology.” (*Id.* ¶ 7.) In 2004, Nasdaq launched its first fully-electronic closing auction, and obtained multiple patents protecting this innovation. (*Id.* ¶ 8.) The closing auction process “facilitates trading during some of the busiest trading periods in the markets.” (*Id.* ¶ 9.) IEX has also launched a closing auction process, which was allegedly ““designed based on extensive review

of’ Nasdaq’s patented process.” (*Id.* ¶ 10.) IEX has also allegedly stated “that the information to be disseminated to the market during IEX closing auctions is ‘substantially similar’ to the ‘Nasdaq Net Imbalance Order Indicator,’ a key feature of certain of the patents asserted here.” (*Id.*) IEX never obtained or sought a license to make, use, sell, or offer to sell Nasdaq’s patented inventions. (*Id.* ¶ 11.)

As such, on March 1, 2018, Nasdaq filed this infringement action as to all Patents-in Suit “to stop, and obtain fair compensation for, IEX’s unauthorized reliance on Nasdaq’s technology.” (*Id.* ¶ 11.) Nasdaq also seeks “enhanced damages for willful infringement” because “at least one former Nasdaq employee involved in building IEX’s trading system likely knew about the asserted patents or underlying applications, and because IEX has publicly acknowledged its reliance on Nasdaq technologies.” (*Id.* ¶ 12.) On May 30, 2018, IEX filed a Motion to Dismiss the Complaint, alleging: (1) the ’609 Patent is “directed to the patent-ineligible abstract idea of comparing first and second data sets for the purpose of updating the first data set using nothing but conventional computers”; (2) that the Complaint fails to plead IEX infringed on the Patents-in-Suit; and (3) that Nasdaq fails to allege facts supporting its induced infringement claims and willful infringement. (ECF No. 23-1 at 3-4.) Nasdaq opposed the Motion on July 10, 2018. (ECF No. 27.) On November 30, 2018, IEX filed a supplemental brief. (ECF No. 42.) As such, the Court provided Nasdaq with an opportunity to respond. Nasdaq responded on December 5, 2018. (ECF No. 44.)

## **II. LEGAL STANDARD**

In deciding a motion to dismiss pursuant to Federal Rule of Civil Procedure 12(b)(6), a district court is “required to accept as true all factual allegations in the complaint and draw all inferences in the facts alleged in the light most favorable to the [plaintiff].” *Phillips*, 515 F.3d at 228. “[A] complaint attacked by a . . . motion to dismiss does not need detailed factual allegations.”

*Bell Atl. v. Twombly*, 550 U.S. 544, 555 (2007). However, the plaintiff’s “obligation to provide the ‘grounds’ of his ‘entitle[ment] to relief’ requires more than labels and conclusions, and a formulaic recitation of the elements of a cause of action will not do.” *Id.* (citing *Papasan v. Allain*, 478 U.S. 265, 286 (1986)). A court is “not bound to accept as true a legal conclusion couched as a factual allegation.” *Papasan*, 478 U.S. at 286. Instead, assuming the factual allegations in the complaint are true, those “[f]actual allegations must be enough to raise a right to relief above the speculative level.” *Twombly*, 550 U.S. at 555.

“To survive a motion to dismiss, a complaint must contain sufficient factual matter, accepted as true, to ‘state a claim for relief that is plausible on its face.’” *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009) (citing *Twombly*, 550 U.S. at 570). “A claim has facial plausibility when the pleaded factual content allows the court to draw the reasonable inference that the defendant is liable for misconduct alleged.” *Id.* This “plausibility standard” requires the complaint allege “more than a sheer possibility that a defendant has acted unlawfully,” but it “is not akin to a ‘probability requirement.’” *Id.* (citing *Twombly*, 550 U.S. at 556). “Detailed factual allegations” are not required, but “more than an unadorned, the defendant-harmed-me accusation” must be pled; it must include “factual enhancements” and not just conclusory statements or a recitation of the elements of a cause of action. *Id.* (citing *Twombly*, 550 U.S. at 555, 557).

“Determining whether a complaint states a plausible claim for relief [is] . . . a context-specific task that requires the reviewing court to draw on its judicial experience and common sense.” *Iqbal*, 556 U.S. at 679. “[W]here the well-pleaded facts do not permit the court to infer more than the mere possibility of misconduct, the complaint has alleged—but it has not ‘show[n]’—‘that the pleader is entitled to relief.’” *Id.* at 679 (quoting Fed. R. Civ. P. 8(a)(2)).

While as a general rule, a court may not consider anything beyond the four corners of the complaint on a motion to dismiss pursuant to 12(b)(6), the Third Circuit has held “a court may consider certain narrowly defined types of material without converting the motion to dismiss [to one for summary judgment pursuant under Rule 56].” *In re Rockefeller Ctr. Props. Sec. Litig.*, 184 F.3d 280, 287 (3d Cir. 1999). Specifically, courts may consider any “document *integral to or explicitly relied upon* in the complaint.” *In re Burlington Coat Factory Sec. Litig.*, 114 F.3d at 1426.

### **III. DECISION**

#### **A. '609 Patent**

IEX argues Nasdaq's '609 Patent claims are unpatentable abstract ideas and are therefore invalid under 35 U.S.C. § 101. (ECF No. 23-1 at 5.) Nasdaq argues the asserted claims of the '609 Patent are patent eligible because they are directed to resolve a technological problem and focus on the specific means or methods to improve technology instead of being directed at a result. (*See* ECF No. 27 at 5-23.)

Section 101 of the Patent Act defines the subject matter eligible for patent protection. “Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.” 35 U.S.C. § 101. However, § 101 is limited by three judicially created exceptions: “Laws of nature, natural phenomena, and abstract ideas are not patentable.” *Alice Corp. Pty. v. CLS Bank Int'l*, 134 S. Ct. 2347, 2354 (2014). “Phenomena of nature, though just discovered, mental processes, and abstract intellectual concepts are not patentable, as they are the basic tools of scientific and technological work.” *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972). Nevertheless, courts should “tread carefully in construing this exclusionary

principle.” *Alice Corp. Pty.*, 134 S. Ct. at 2354. “[T]oo broad an interpretation of this exclusionary principle could eviscerate patent law.” *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 71 (2012). “For all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.” *Id.* Therefore, an invention cannot be rendered ineligible for patent just because it involves an abstract concept. *See Diamond v. Diehr*, 450 U.S. 175, 187 (1981). “[A] process is not unpatentable simply because it contains a law of nature or a mathematical algorithm.” *Id.* (citation omitted).

The Supreme Court has established a two-step “framework for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts.” *Alice Corp. Pty.*, 134 S. Ct. at 2355. First, a court must “determine whether the claims at issue are directed to one of those patent-ineligible concepts.” *Id.* If the answer is no, the inquiry ends because the claims are patent-eligible. *Mortg. Grader, Inc. v. First Choice Loan Servs. Inc.*, 811 F.3d 1314, 1324 (Fed. Cir. 2016). If the answer is yes, the court must proceed to Step Two. At Step Two the court must “consider the elements of each claim both individually and as an ordered combination to determine whether the additional elements transform the nature of the claim into a patent-eligible application.” *Alice Corp. Pty.*, 134 S. Ct. at 2355 (citation omitted). This is a search for an “inventive concept,” which is defined as “an element or combination of elements that is sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.” *Id.* (citation omitted and modification in original). “[C]laim elements are considered in combination for evaluation under *Alice* Step 1, and then individually when *Alice* Step 2 is reached.” *Trading Techs. Int’l, Inc. v. CQG, Inc.*, 675 F. App’x 1001, 1005 (Fed. Cir. 2017).

Whether a patent claims patent-eligible subject matter is a question of law. *Arrhythmia Research Tech., Inc. v. Corazonix Corp.*, 958 F.2d 1053, 1055–56 (Fed. Cir. 1992). Therefore, a court must first determine whether the claims at issue are directed to a patent-ineligible concept. Not “all improvements in computer-related technology are inherently abstract and, therefore, must be considered at step two.” *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016). “Indeed, some improvements in computer-related technology when appropriately claimed are undoubtedly not abstract, such as a chip architecture, an LED display, and the like.” *Id.* Moreover, not are “claims directed to software, as opposed to hardware, are inherently abstract and therefore only properly analyzed at the second step of the *Alice* analysis.” *Id.* As such, at this step a court must ask “whether the claims are directed to an improvement to computer functionality versus being directed to an abstract idea, even at the first step of the *Alice* analysis.” *Id.* For that reason, in cases where the claims are related to computer-technology, the court must first ask “whether the focus of the claims is on the specific asserted improvement in computer capabilities (i.e., the self-referential table for a computer database) or, instead, on a process that qualifies as an ‘abstract idea’ for which computers are invoked merely as a tool.” *Id.* In *McRO, Inc. v. Bandai Namco Games Am., Inc.*, the Federal Circuit defined the key inquiry as “whether the claims in these patents focus on a specific means or method that improves the relevant technology or are instead directed to a result or effect that itself is the abstract idea and merely invoke generic processes and machinery.” 837 F.3d 1299, 1314 (Fed. Cir. 2016).

As a preliminary matter, courts have found that claims focused on “collecting information, analyzing it, and displaying certain results of the collection and analysis are directed to an abstract idea.” *SAP Am., Inc. v. Investpic, LLC*, 898 F.3d 1161, 1167 (Fed. Cir. 2018) (citation omitted). “Information as such is an intangible, hence abstract, and collecting information, including when

limited to particular content (which does not change its character as information), [i]s within the realm of abstract ideas.” *Id.* (citations omitted and alteration in original). Further, “analyzing information . . . by mathematical algorithms, without more” is also abstract. *Id.* (citations omitted). Lastly, “merely presenting the results of abstract processes of collecting and analyzing information, without more (such as identifying a particular tool for presentation), is abstract as an ancillary part of such collection and analysis.” *Id.* (citations omitted).

Likewise, claims directed to the “process of gathering and analyzing information of a specified content, then displaying the results,” without “any particular assertedly inventive technology for performing those functions,” were held ineligible in *Electric Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1354 (Fed. Cir. 2016). In addition, claims directed to the “idea of generating a second menu from a first menu and sending the second menu to another location” were held patent-ineligible in *Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229 (Fed. Cir. 2016).

Similarly, in *FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089 (Fed. Cir. 2016), the Federal Circuit found computer-implemented claims for collecting and analyzing data to find specific events to be patent-ineligible abstract ideas. Specifically, the court found the method was directed to a “combination” of two “abstract-idea categories”: (1) “collecting information, including when limited to particular content”; and (2) “analyzing information by steps people go through in their minds, or by mathematical algorithms, without more, as essentially mental processes.” *Id.* at 1093–94 (citations omitted). In determining that the patent was an ineligible abstract idea, the court emphasized that “the ‘realm of abstract ideas’ includes ‘collecting information, including when limited to particular content,’” and that “analyzing information by steps people go through in their minds, or by mathematical algorithms, without more, [are] essentially mental processes within the abstract-idea category.” *Id.* (quoting *Elec. Power Grp.*,



*LLC*, 830 F.3d at 1353). The court further noted that “merely presenting the results of abstract processes of collecting and analyzing information, without more (such as identifying a particular tool for presentation), is abstract as an ancillary part of such collection and analysis.” *Id.* (quoting *Elec. Power*, 830 F.3d at 1353). Therefore, the court concluded that, because the claims at issue were “directed to collecting and analyzing information to detect misuse and notifying a user when misuse is detected,” the claims were patent ineligible. *Id.* at 1094; see *GoDaddy.com LLC v. RPost Commc’ns Ltd.*, No. 14-00126, 2016 WL 3165536, at \*8–13 (D. Ariz. June 7, 2016), *aff’d*, 685 F. App’x 992 (Fed. Cir. 2017) (invalidating a patent “directed to the abstract idea of collecting and providing information” that used an “authenticator” applying a “mathematical association method” to enhance message delivery and correspondence); *Collarity, Inc. v. Google Inc.*, No. 11-1103, 2015 WL 7597413, at \*4–8 (D. Del. Nov. 25, 2015) (invalidating a patent to enhance online searching that recited methods to generate, refine, and suggest keywords based partly on a user’s past queries); *OpenTV, Inc. v. Netflix Inc.*, 76 F. Supp. 3d 886, 892–93 (N.D. Cal. 2014) (invalidating as abstract a patent that claimed methods to gather data and create custom advertising based on that data).

However, not all improvements in computer-related technology are inherently abstract. In *McRO, Inc.*, the Federal Circuit held a method for automating the animation of lip movement and facial expressions, which replaced an animator’s subjective evaluation with automated rules, was patent eligible. 837 F.3d at 1313–16. The Federal Circuit determined that because the method involved “a specific asserted improvement in computer animation, i.e., the automatic use of rules of a particular type,” it did not just use a computer “as a tool to automate conventional activity” but instead constituted an improvement to an existing technological process itself. *Id.* at 1314. Therefore, the Federal Circuit defined the key inquiry as “whether the claims in these patents focus

on a specific means or method that improves the relevant technology or are instead directed to a result or effect that itself is the abstract idea and merely invoke generic processes and machinery.” *Id.*

In *Enfish*, the Federal Circuit found claims related to a database structure were not abstract because their focus included a new “self-referential table [that] functions differently than conventional database structures.” 822 F.3d at 1337. Specifically, the self-referential table allowed programmers to construct databases in new ways that required less modeling and configuring of various tables prior to launch. *Id.* at 1333. This was distinguished from the performance of “economic or other tasks for which a computer is used in its ordinary capacity.” *Id.* at 1336.

Similarly, in *Visual Memory LLC v. NVIDIA Corp.*, 867 F.3d 1253 (Fed. Cir. 2017), the court found that the claims at issue were patent-eligible because they were directed at an “improved memory system” that configured operational characteristics of a computer’s cache memory based on the type of processor connected to the memory system. *Id.* at 1261. Depending on the processor type, the invention’s memory caches could adjust their function, which allowed the claimed invention to accommodate different types of processors without compromising performance. *Id.* at 1256–57, 1259.

Likewise, in *Trading Technologies International, Inc.*, a trading software invention was found to be patent-eligible. 675 F. App’x at 1006. The Federal Circuit upheld the validity of patents because they “improve[d] the accuracy of trader transactions, utilizing a software-implemented programmatic met.” *Id.* The court found “the claimed subject matter [was] directed to a specific improvement to the way computers operate, for the claimed graphical user interface method imparts a specific functionality to a trading system directed to a specific implementation of a solution to a problem in the software arts.” *Id.* (citations omitted). The problems the patent solved

were those that arose when a trader attempted “to enter an order at a particular price, but misse[d] the price because the market moved before the order was entered and executed” or “sometimes . . . trades were executed at different prices than intended, due to rapid market movement.” *Id.* at 1002-03.

In *Amdocs (Israel) Ltd. v. Openet Telecom, Inc.*, the Federal Circuit held that the patent provided an inventive concept because the components described in the patent were arranged in such a way to “achieve a technological solution to a technological problem specific to compute networks.” 841 F.3d 1288, 1300-01 (Fed. Cir. 2016), *cert. denied*, 138 S.Ct. 469 (2017). And more recently, in *Finjan, Inc. v. Blue Coat Systems, Inc.*, the Federal Circuit held claims directed to a behavior-based virus scanning method constituted an improvement in computer functionality over the “traditional, ‘code-matching’ virus scans.” 879 F.3d 1299, 1304 (Fed. Cir. 2018). The claimed behavior-based scans, in contrast to other systems which searched for matching codes, enabled more “nuanced virus filtering” in analyzing whether “a downloadable’s code . . . performs potentially dangerous or unwanted operations.” *Id.* at 1304. As such, the court determined the claims were “directed to a non-abstract improvement in computer functionality, rather than the abstract idea of computer security writ large.” *Id.* at 1305.

In *Data Engine Technologies LLC v. Google LLC*, the Federal Circuit found “a specific method for navigating through three-dimensional electronic spreadsheets” was “not directed to an abstract idea.” 906 F.3d 999, 1007 (Fed. Cir. 2018). The court reasoned that the method provided “a specific solution to then-existing technological problems in computers and prior art electronic spreadsheets.” *Id.* at 1008. The navigation difficulties of prior-art spreadsheets were addressed “in a particular way—by providing a highly intuitive, user-friendly interface with familiar notebook tabs for navigating the three-dimensional worksheet environment.” *Id.* The court distinguished

other cases that held claims to be “simply directed to displaying a graphical user interface or collecting, manipulating, or organizing information.” *Id.* at 1010. Instead, the claims in *Data Engine* recited “a specific structure (i.e., notebook tabs) within a particular spreadsheet display that performs a specific function (i.e., navigating within a three-dimensional spreadsheet).” *Id.* at 1010–11.

Recently, in *Ancora Techs., Inc. v. HTC Am., Inc.*, No. 2018-1404, 2018 WL 6005021, at \*4 (Fed. Cir. Nov. 16, 2018), the Federal Circuit found claims directed to a method and system of preventing unauthorized use of software by checking whether a software program was licensed and stopping the program or taking other action were patent eligible. The court reasoned that “[i]mproving security—here, against a computer’s unauthorized use of a program—can be a non-abstract computer-functionality improvement if done by a specific technique that departs from earlier approaches to solve a specific computer problem.” *Id.* (citation omitted). The claimed method in *Ancora* specifically identified how the functionality improvement was effectuated by stating “a structure containing a license record is stored in a particular, modifiable, non-volatile portion of the computer’s BIOS, and the structure in that memory location is used for verification by interacting with the distinct computer memory that contains the program to be verified.” *Id.* Therefore, the court determined the claim addressed “a technological problem with computers: vulnerability of license-authorization software to hacking.” *Id.* Moreover, the court noted the prosecution history reinforced “what the patent itself indicates about the change in previous verification techniques for computer security.” *Id.* (citations omitted). In short, the court concluded the patent was “directed to a solution to a computer-functionality problem: an improvement in computer functionality that has ‘the specificity required to transform a claim from one claiming

only a result to one claiming a way of achieving it.’” *Id.* (quoting *SAP America, Inc.*, 898 F.3d at 1167).

Under the backdrop of the cited cases, the ’609 Patent is a close question of eligibility. At this stage, however, the Court finds the ’609 Patent claims patent eligible because they are directed at resolving an existing technological problem in “extracting and selecting operators in an efficient way . . . in order to reduce the load on a processor and to reduce data dissemination such as bandwidth in a computer system” for electronic trading of securities, derivatives, commodities, and other financial instruments. ’609 Patent 1:53-57. The Court concludes this case is analogous to *Trading Technologies, Amdocs*, and *Data Engine* because the ’609 Patent was designed to “achieve a technological solution to a technological problem specific to computer networks,” solving bottleneck and other latency issues associated with transmission of large data sets. *Amdocs (Israel) Ltd.*, 841 F.3d at 1300-01; *Data Engine Techs. LLC*, 906 F.3d at 1008 (holding a specific method for navigating through an electronic spreadsheet was not an abstract idea and therefore patent-eligible because the method provided “a specific solution to then-existing technological problems in computers and prior art electronic spreadsheets”); *Trading Techs. Int’l, Inc.*, 675 F. App’x at 1006 (finding the patent eligible because “the claimed subject matter was directed to a specific improvement to the way computers operation, for the claimed graphical user interface method imparts a specific functionality to a trading system directed to a specific implementation of a solution to a problem in the software arts”). Indeed, the specifications of the ’609 Patent discusses the inherent difficulty in distributing a “large amount of data . . . for making trade decisions” in the electronic securities trading context. ’609 Patent 1:21-24. It notes that simply “updating the hardware” alone “may not [] be enough to boost the performance in the central system” for data dissemination. *Id.* 1:32-34.

The Court further finds the claims of the '609 Patent are not directed to the abstract idea of comparing first and second data sets for the purpose of updating the first data set, but instead are claims regarding a “computer system” which allows for more “efficient[]” “dissemination” of updated purchase/sales price information, which constitutes an improvement to an existing technological process. *Id.* 1:5-9, 1:62-64, 10:13-36. Specifically, claim 1 describes a “computer system for generating an update data set to be sent to remote terminals,” comprised of certain features. *Id.* 10:13-17. Such features of the computer system consist of: (1) “a memory”; (2) “a comparator connectable to the memory”; and (3) a “selector . . . connectable to the memory.” *Id.* 10:13-35. The “computer system . . . [is] further compris[ed of] a communicator associated with the selector for generating and sending an update message comprising the update data set.” *Id.* 10:37-40.

Much like in *McRO* and *Ancora*, the claims in the '609 Patent focus on specific means or methods to improve the relevant technology instead of being directed at a result or effect. *Ancora Techs., Inc.*, 2018 WL 6005021, at \*4 (finding the patent was “directed to a solution to a computer-functionality problem: an improvement in computer functionality that has ‘the specificity required to transform a claim from one claiming only a result to one claiming a way of achieving it’”); *McRO, Inc.*, 837 F.3d at 1314 (defining the key inquiry as “whether the claims in these patents focus on a specific means or method that improves the relevant technology or are instead directed to a result or effect that itself is the abstract idea and merely invoke generic processes and machinery”). Specifically, the claims describe how the “comparator” component of the computer system operates, *i.e.*, by:

sequentially comparing the data elements in the first data set, the result of a first comparison controls which data element in the first data set and which data element in the second data set that will be compared in a second comparison *updating a parameter in the*

*memory* after each second comparison, and *initiating a selector* upon detection of a data element in the second data set being identical to a data element in the first data set[.]

'609 Patent 10:12-36. The claims also detail the means for which the steps in the “data set” are stored and analyzed in the “computer system”: (1) “updating a parameter in the memory after each second comparison;” (2) “initiating a selector upon detection of a data element in the second data set being identical to a data element in the first data set”; and (3) “storing the determined operators in the memory.” *Id.* Claim 12 also describes the process after detection of data in the second data set that is identical to data in the first data set, “initiating a selection process determining operators based on the change parameter stored in the memory.” *Id.* 11:18-21. Because the Court finds the claims of the '609 Patent are not directed to a patent-ineligible concept, and not abstract ideas, but instead are patent eligible, the inquiry ends, and the Court need not proceed to Step Two of the *Alice* analysis.<sup>1</sup> *Mortg. Grader, Inc.*, 811 F.3d at 1324. Accordingly, IEX’s Motion to Dismiss Nasdaq’s infringement claims based on the '609 Patent is **DENIED**.

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<sup>1</sup> Although the Court need not and does not reach Step Two of the *Alice* analysis, it notes, nevertheless, Step Two would be “more appropriately addressed after discovery in the context of a motion for summary judgment.” *Device Enhancement LLC v. Amazon.com, Inc.*, 189 F. Supp. 3d 392, 401 (D. Del. 2016). “The question of whether a claim element or combination of elements is well-understood, routine and conventional to a skilled artisan in the relevant field is a question of fact.” *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1368 (Fed. Cir. 2018). “Any fact . . . that is pertinent to the invalidity conclusion must be proven by clear and convincing evidence.” *Id.* Further, “[w]hether the claim elements or the claimed combination are well understood, routine, conventional is a question of fact.” *Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1125 (Fed. Cir. 2018) And here, “that question cannot be answered adversely to the patentee based on the sources properly considered on a motion to dismiss, such as the complaint, the patent, and materials subject to judicial notice.” *Id.*

## B. Direct Infringement

IEX argues Nasdaq's direct infringement claims fail because the Complaint does not allege "specific facts supporting a reasonable inference of direct infringement." (ECF No. 23-1 at 20-21.) Nasdaq asserts its Complaint contains robust infringement allegations to surpass the *Iqbal/Twombly* standard. (ECF No. 27 at 23.)

"Although the *Iqbal/Twombly* standard applies to 'all civil actions,' its applicability to patent cases has been interpreted differently among federal courts." *Robern, Inc. v. Glasscrafters, Inc.*, 206 F. Supp. 3d 1005, 1008 (D.N.J. 2016). This discrepancy is due to then Rule 84 of the Federal Rules of Civil Procedure, which provided guidance on how to sufficiently plead a claim. *Id.* Rule 84 stated: "The Forms in the Appendix . . . illustrate the simplicity and brevity that these rules contemplate." Fed. R. Civ. P. 84. Form 18 in the Appendix of Forms, entitled "Complaint for Patent Infringement," provided an example for pleading a claim of direct patent infringement. However, in December 2015, Rule 84 was abrogated. *Robern, Inc.*, 206 F. Supp. 3d at 1008. As such, Form 18 was likewise abrogated. *Id.*

Before Rule 84's abrogation, courts took different views as to whether *Iqbal/Twombly*'s higher pleading standard or Form 18's standard applied. *Id.* Form 18 required a plaintiff to merely plead the following:

- (1) an allegation of jurisdiction; (2) a statement that the plaintiff owns the patent; (3) a statement that defendant has been infringing the patent "by making, selling, and using [the device] embodying the patent"; (4) a statement that the plaintiff has given the defendant notice of its infringement; and (5) a demand for an injunction and damages.

*K-Tech Telecomm., Inc. v. Time Warner Cable, Inc.*, 714 F.3d 1277, 1283 (Fed. Cir. 2013) (quoting *McZeal v. Sprint Nextel Corp.*, 501 F.3d 1354, 1357 (Fed. Cir. 2007)). In *In re Bill of Lading Transmission & Processing Sys. Patent Litigation.*, 681 F.3d 1323, 1334 (Fed. Cir. 2012),



the Federal Circuit made clear that the “Forms are controlling only for causes of action for which there are sample pleadings.” 681 F.3d at 1336. There, the court found that a claim for direct infringement was properly pled if consistent with Form 18. *Id.* at 1334. However, if the allegation was one of indirect infringement, the Federal Circuit looked to the *Iqbal/Twombly* standard. *Id.* at 1337–39.

Unlike the Federal Circuit, “[o]ther courts . . . held that because the *Twombly/Iqbal* pleading standard applies to all civil cases, a patent infringement complaint must do more than simply assert the bare elements of a claim, and that a Form 18-style complaint will not suffice, in the aftermath of *Twombly* and *Iqbal*.” *Robern, Inc.*, 206 F. Supp. 3d at 1009-10 (quoting *Gradient Enters., Inc. v. Skype Techs. S.A.*, 848 F. Supp. 2d 404, 407 (W.D.N.Y. 2012) and citing *Medsquire LLC v. Spring Med. Sys. Inc.*, No. 11–4504, 2011 WL 4101093, at \*2 (C.D. Cal. Aug. 31, 2011) (requiring *Iqbal/Twombly* plausibility pleading in cases of direct patent infringement); *Bender v. LG Elecs. U.S.A., Inc.*, No. 09–02114, 2010 WL 889541, at \*6 (N.D. Cal. Mar. 11, 2010) (same)).

This discrepancy remains even after the abrogation of Rule 84. Some courts in this district have “determined that the *Iqbal/Twombly* plausibility standard applies,” *Robern, Inc.*, 206 F. Supp. 3d at 1010, while others continue to use Form 18. *Endo Pharm., Inc. v. Impax Labs., Inc.*, No. 16–2526, 2016 WL 6246773, at \*5 (D.N.J. Oct. 25, 2016). Irrespective of what standard should or does apply, the Court finds Nasdaq’s Complaint satisfies the higher standard of *Iqbal/Twombly*.

Under *Iqbal/Twombly*, a plaintiff is required to plead “factual content that allows the court to draw the reasonable inference that the defendant is liable of the misconduct alleged.” *Disc Disease Sols. Inc. v. VGH Sols., Inc.*, 888 F.3d 1256, 1260 (Fed. Cir. 2018) (quoting *Iqbal*, 556 U.S. at 678 (citing *Twombly*, 550 U.S. at 556)). “Specific facts are not necessary; the statement

need only give the defendant fair notice of what the . . . claim is and the ground upon which it rests.” *Erickson v. Pardus*, 551 U.S. 89, 93 (2007) (citations omitted).

The direct infringement of a patent occurs when a party, without authority, “makes, uses, offers to sell, or sells any patented invention, within the United States.” 35 U.S.C. § 271(a). “A patentee may prove direct infringement under § 271(a) either by (1) demonstrating specific instances of direct infringement; or (2) showing that an accused device necessarily infringes on the patent.” *ACCO Brands, Inc. v. ABA Locks Mfrs. Co.*, 501 F.3d 1307, 1313 (Fed. Cir. 2007). To state a claim for direct infringement, a plaintiff must list the defendant’s products which allegedly infringe, describe the alleged infringement, and relate “factual assertions to the pertinent claims” in its patent. *Robern, Inc.*, 206 F. Supp. 3d at 1011. The complaint must allege that the accused product infringes on “each and every element of at least one claim” of the plaintiff’s patents “either literally or equivalently.” *Disc Disease Sols. Inc.*, 888 F.3d at 1260.

Here, as to each asserted patent, Nasdaq’s Complaint provides sufficient detail to state a claim under *Iqbal/Twombly*. Indeed, Nasdaq names IEX’s product as the Accused Platform, which allegedly infringed each of the Nasdaq patents and claims, “the Accused Platform and any other IEX platforms.” (ECF No. 1 ¶¶ 41, 108, 138, 164, 210, 255, and 300.) In each Count of the Complaint, Nasdaq also describes the alleged infringement and identifies how IEX’s product infringes on every element of at least one claim in each of Nasdaq’s patents. For example, as to the ’264 Patent and ’797 Patent, the Complaint alleges:

with regard to claim 1, upon information and belief, IEX’s Accused Platform is, or includes, an electronic system for trading of securities, the system comprising: a processor device; a memory storing a queue, the queue storing closing orders along with other orders for a traded security; a computer readable medium storing a computer program product, the computer program product comprising instructions to cause the server computer system to: receive the closing orders and the other orders for the security;

disseminate an order imbalance indicator indicative of predicted trading characteristics of the security at close of trading, the predicted trading characteristics based upon a price at which those closing orders would execute at the time that the order imbalance indicator is disseminated; receive additional closing orders that maximize the number of shares executed at a predicted final closing price; determine a final closing price for the security based on marketable closing orders and other orders; and execute at least some of the closing orders at the determined final closing price.

(*Id.* ¶¶ 42, 109.) Regarding the '264 Patent, the Complaint also identifies “IEX Auction Information”—a term drawn from IEX’s documents—as including information that is “substantially similar . . . to the Nasdaq Net Imbalance Order Indicator.” (*Id.* ¶ 48-49.) The Complaint further specifies that “Auction Information to be disseminated by IEX includes information ‘indicat[ing] potential clearing prices for the auction.’” *Id.* ¶ 48. This is sufficient to provide IEX with reasonable notice of the specific way it is allegedly infringing on this patent.

Regarding the '797 Patent, the Complaint asserts the “IEX Auction Information” is similar to the Nasdaq Net Imbalance Order Indicator and that IEX’s disseminated “Reference Price” is the “price inside the Reference Price Range at which orders from the Auction Book would match.” (*Id.* ¶¶ 114, 124.) This, in combination with the above, is sufficient to provide IEX with reasonable notice of the specific way it is allegedly infringing on this patent.

As to the '827 Patent, the Complaint states:

As an example, with regard to claim 1, upon information and belief, IEX’s Accused Platform is, or includes, a system for securities trading, the system comprising: a plurality of securities processors for processing attributable security interest messages generated by market participants, the attributable security interest messages relate to securities traded on the securities trading system, each security is assigned to one or more of the securities processors based on a unique security identifier associated with the security; and an order routing system for routing each attributable security interest message to one of the securities processors according to the assignment.

(*Id.* ¶ 139.) The Complaint also contends that “[a]t the core of [IEX’s] System are several matching engines’ used to process[] ‘incoming orders’ from ‘Users.’” (*Id.* ¶ 141.) Paragraphs 146 and 147 of the Complaint detail IEX’s use of multiple matching engines, all of which also “handles a set of symbols” and are routed via “order entry gateways.” (*Id.* ¶¶ 146-47.) This is sufficient to provide IEX with reasonable notice of the specific way it is allegedly infringing on this patent.

As to the ’112 Patent, the Complaint states:

As an example, with regard to claim 1, upon information and belief, IEX’s Accused Platform is, or includes, a computer system for execution of transactions involving execution of orders for securities, the computer system comprises: a central processor device; a sequential access storage device that provides a persistent store of recorded information; a main memory coupled to the central processor and the main memory storing: an order book that includes order and/or quotes for a particular security, the orders and/or quotes having various prices, sizes and time priorities; executable code that causes the processor device to match the orders and/or quotes in the order book for the security to a received order for the security, with the order book only accessible by the executable code that matches orders and/or quotes; and the executable code that matches further comprising: order management executable code that sends a message to report matching of the received order, or a portion of the received order, to orders and/or quotes in the order book to an order activity log file located in the sequential access storage device.

(*Id.* ¶ 165.) Paragraphs 169 through 172 also describe an IEX patent application and allege how IEX’s technology depicted in the application is the same as that in Nasdaq’s ’112 Patent. (*Id.* ¶¶ 169-72.) This is sufficient to provide IEX reasonable notice of the specific way it is allegedly infringing on this patent.

As to the ’622 Patent, the Complaint states:

As an example, with regard to claim 1, upon information and belief, IEX’s Accused Platform is, or includes, a computer system for trading securities in an electronic trading venue, the computer system comprises: a processor; a main memory that stores: an order book, the order book comprising a plurality of unfulfilled orders to trade a particular security that trades on the electronic trading venue,

with the orders sent for execution against contra side interest; and a first portion of a computer system product that accesses the order book comprising instructions to: find the orders in the order book that can be matched to a received order sent to the electronic trading venue; match a portion of a received order for a security against one or more orders stored in the order book that resides in the main memory, with the first portion of the computer program having exclusive access to the order book; and a remaining portion of a computer program product to access a log stored in a persistent storage device and to process activities related to the processing of securities other than to match the received order to orders in the order book, with the remaining portion having access to the order book in the main memory only through the first portion of the computer program product; one or more persistent, computer readable storage device that store the computer program product and the log to store results of related to processing of securities other than to match the received order to orders stored in the order book.

(*Id.* ¶ 211.) The Complaint also claims that the “matching engine” identified in IEX’s patent application is the only “portion of . . . code” that can access the order book. (*Id.* ¶ 216.) This is sufficient to provide IEX with reasonable notice of the specific way it is allegedly infringing on this patent.

Regarding the ’362 Patent, the Complaint states:

As an example, with regard to claim 1, upon information and belief, IEX’s Accused Platform is, or includes, a computer system comprising: a processor configured to receive electronic trading orders and operatively coupled to; a main non-transitory memory that holds an order book containing unexecuted trading orders received by the processor, the main non-transitory memory holding the entire order book that stores unexecuted orders for at least one security trading on an electronic trading venue; and an executable computer program executed on the processor and residing in the main non-transitory memory, with execution of the computer program causing the processor to: match, by the processor, a received, new, trading order against the unexecuted trading orders pending in the order book, during matching, the processor accessing the order book for matching wherein other processes are restricted by said processor from accessing the order book; insert, in a log file that resides in a non-transitory storage medium, information representing an activity relating to a security interest stored in the order book that resides in the main non-transitory memory; and

receive a user query relating to the security interest stored in the log file that resides in the non-transitory storage medium.

(*Id.* ¶ 256.) The Complaint further specifies that: (1) “IEX’s User Manual states that IEX offers an electronic ‘trading platform’ that processes ‘incoming orders’ from ‘Users’” (*id.* ¶ 257); (2) “IEX’s User Manual states that IEX’s system has a ‘continuous, automatic matching function’” (*id.* ¶ 259); and (3) describes order book isolation like Nasdaq’s (*id.* ¶¶ 260-62). This is also sufficient to provide IEX with reasonable notice of the specific way it is allegedly infringing on this patent.

Lastly, as to the ’609 Patent, the Complaint alleges:

As an example, with regard to claim 1, upon information and belief, IEX’s Accused Platform is, or includes, a computer system for generating an update data set to be sent to remote terminals, the update data set comprising operators describing differences between a first data set comprising sorted data elements and a second data set comprising sorted data elements, the computer system comprising: a memory comprising the first and the second data set, a comparator connectable to the memory for sequentially comparing the data elements in the second data set with the data elements in the first data set, the result of a first comparison controls which data element in the first data set and which data element in the second data set that will be compared in a second comparison updating a parameter in the memory after each second comparison, and initiating a selector upon detection of a data element in the second data set being identical to a data element in the first data set, the selector being connectable to the memory and to the comparator, the selector being adapted to determine operators based on the parameter stored in the memory, and storing the determined operators in the memory, wherein the computer system is configured to generate an update data set, including the determined operators describing differences between the second data set and the first data set, to be sent to the remote terminals.

(*Id.* ¶ 301.) The Complaint further declares IEX’s system performs a comparison of order book versions, identifies how the order book has changed, and disseminates an updated data set based on the comparison. (*Id.* ¶¶ 302-308.) This is sufficient to provide IEX with reasonable notice of the specific way it is allegedly infringing on this patent.

To the extent IEX argues the Complaint does not specify the precise methods IEX use in its infringing device, at this stage of the litigation, all Nasdaq has access to is IEX's public statements, which it used to fashion the Complaint. The specifics of how IEX's purportedly infringing device works is something to be established through discovery. *McZeal v. Sprint Nextel Corp.*, 501 F.3d 1354, 1358 (Fed. Cir. 2007). The Court finds Nasdaq's 80-page, 321-paragraph Complaint pleads "factual content that allows the court to draw the reasonable inference that the defendant is liable of the misconduct alleged." *Disc Disease Sols. Inc.*, 888 F.3d at 1260 (citation omitted). Accordingly, IEX's Motion to Dismiss Nasdaq's direct infringement claims is **DENIED**.

### **C. Induced Infringement**

IEX argues Nasdaq fails to adequately plead induced infringement because it failed to plead direct infringement, specific intent to induce infringement, and that IEX had pre-suit knowledge of the Patents-in-Suit. (*See* ECF No. 23-1 at 29-35.) Nasdaq argues it has sufficiently plead induced infringement because it asserts the third parties involved and how they infringed. (ECF No. 27 at 39-40.)

Title 35 of the United States Code section 271(b) states, "Whoever actively induces infringement of a patent shall be liable as an infringer." "Inducement requires a showing that the alleged inducer knew of the patent, knowingly induced the infringing acts, and possessed a specific intent to encourage another's infringement of the patent." *Vita-Mix Corp. v. Basic Holding, Inc.*, 581 F.3d 1317, 1328 (Fed. Cir. 2009). Therefore, to state a claim for induced infringement, a plaintiff must plead facts raising a plausible inference that: "(1) Defendants knowingly induced a third party to perform specific acts; (2) Defendants specifically intended for the induced acts to infringe the [a]sserted [p]atents; and (3) as a result of the inducement, the third party directly infringed the [a]sserted [p]atents." *Straight Path IP Grp., Inc. v. Vonage Holdings Corp.*, No. 14-

502, 2014 WL 3345618, at \*2 (D.N.J. July 7, 2014); *see Hoffman–La Roche Inc. v. Apotex Inc.*, No. 07–4417, 2010 WL 3522786, at \*2 (D.N.J. Sept. 2, 2010).

“[I]nducement requires evidence of culpable conduct, directed to encouraging another’s infringement, not merely that the inducer had knowledge of the direct infringer’s activities.” *DSU Med. Corp. v. JMS Co.*, 471 F.3d 1293, 1306 (Fed. Cir. 2006). The Supreme Court explained that the “knowledge” required for inducement includes both knowledge of the patent and knowledge of infringement. *Commil USA, LLC v. Cisco Sys., Inc.*, 135 S. Ct. 1920, 1926 (2015). Therefore, to “sufficiently plead induced infringement, [the complaints] must contain facts plausibly showing that [the defendants] specifically intended their customers to infringe the . . . patent[s] and knew that the customer’s acts constituted infringement.” *In re Bill of Lading Transmission & Processing Sys. Patent Litig.*, 681 F.3d at 1339.

Here, Nasdaq has not adequately alleged IEX’s specific intent to encourage others to infringe. Nasdaq alleges that IEX induced infringement

by actively and knowingly inducing, directing, causing, and encouraging others, including by not limited to, their consultants, software developers, engineers, customers, repair providers, and end users (such as primary market makers, competitive market makers, and broker-dealers) to make, use, sell, offer to sell, and/or import within the United States, an automated platform made in accordance with the [Patents-in-Suit], including, but not limited to, the Accused Platform, by, among other things, providing access, instructions, and technical assistance relating to the Accused Platform on IEX websites.

(ECF No. 1 ¶¶ 98, 127, 153, 198, 243, 290, 316.) Nasdaq has set forth facts demonstrating that IEX was aware of the Patents-in-Suit. (*Id.* ¶¶ 29-36.) It has also alleged that IEX induced its consultants, software developers, engineers, customers, repair providers, and end users to make, use, sell, offer to sell, and/or import within the United States, an automated platform by providing access, instructions, and technical assistance relating to the Accused Platform on IEX. However,



much like in *Straight Path*, “while these allegations may be sufficient to establish elements one and three of induced infringement,” Nasdaq “has not shown that [IEX] specifically intended for the induced acts to infringe the [Patents-in-Suit].” *Straight Path IP Grp., Inc.*, 2014 WL 3345618, at \*2. Therefore, Nasdaq has failed to establish element two. Accordingly, IEX’s Motion to Dismiss Nasdaq’s induced infringement claims is **GRANTED**.

#### **D. Willful Infringement**

IEX argues Nasdaq fails to adequately plead willful infringement because it has not pled facts that support egregious misconduct or pre-suit knowledge. (ECF No. 23-1 at 35-37.) Nasdaq argues the Complaint adequately pleads willful infringement because it pleads the former Nasdaq employees were involved in the filing and construction of the Patents-in-Suit. (ECF No. 27 at 34-38.)

Pursuant to section 284 of the Patent Act, once infringement has been established, the court has discretion to award enhanced damages against those guilty of patent infringement up to three times the amount found or assessed. *Halo Elecs., Inc. v. Pulse Elecs., Inc.*, 136 S. Ct. 1923, 1935 (2016). In 2016, the Supreme Court abrogated the Federal Circuit’s previous two-part test for establishing willful infringement. *Id.* “In so doing, the [*Halo*] Court invited district courts to exercise discretion in evaluating whether to award enhanced damages under 35 U.S.C. § 284.” *Progme Corp. v. Comcast Cable Commc’n LLC*, No. 17-1488, 2017 WL 5070723, at \*12 (E.D. Pa. Nov. 3, 2017); *see Halo Elecs., Inc.*, 136 S. Ct. at 1935. In other words, *Halo* emphasized that this Court should “exercise its discretion as provided in 35 U.S.C. § 284 in order to determine whether to award enhanced damages, and that the focus should be on whether the patentee has shown that this is an ‘egregious case[] of misconduct beyond typical infringement.’” *Varian Med. Sys., Inc. v. Elekta AB*, No. 15-871, 2016 WL 3748772, at \*7 (D. Del. July 12, 2016); *see also*

*Halo Elecs., Inc.*, 136 S. Ct. at 1936 (Breyer, J., concurring) (“[T]he Court’s references to ‘willful misconduct’ do not mean that a court may award enhanced damages simply because the evidence shows that the infringer knew about the patent and nothing more.”).

“A patent infringer’s subjective willfulness, whether intentional or knowing, ‘may warrant enhanced damages, without regard to whether his infringement was objectively reckless.’” *Prohme Corp.*, 2017 WL 5070723, at \*12 (quoting *Halo Elecs., Inc.*, 136 S. Ct. at 1933). However, a “[m]ere formulaic pleading of willful infringement will not survive a Rule 12(b)(6) motion.” *Id.* Nevertheless, subsequent to *Halo*, broad allegations of willfulness without a specific showing of egregiousness have been enough to withstand a motion to dismiss. *See Bio-Rad Labs Inc. v. Thermo Fisher Scientific Inc.*, 267 F. Supp. 3d 499, 501 (D. Del. 2017) (“At the pleading stage, it is not necessary to show that the case is egregious.”); *DermaFocus LLC v. Ulthera, Inc.*, 201 F. Supp. 3d 465, 473 (D. Del. 2016) (finding that general allegations of willful infringement were sufficient under *Halo* to surpass a motion to dismiss). Therefore, “where a complaint permits an inference that the defendant was on notice of the potential infringement and still continued its infringement, the plaintiff has pled a plausible claim of willful infringement.” *Kyowa Hakka Bio, Co. v. Ajinomoto Co.*, No. 17-313, 2018 WL 834583, at \*13 (D. Del. Feb. 12, 2018) (citing *Telebrands Corp. & Prometheus Brands, LLC v. Everstar Merchandise Co., Ltd.*, No. 17-2878, 2018 WL 585765, at \*8 (D.N.J. Jan. 29, 2018) (allegations that defendants had notice of the patent-in-suit since their receipt of the complaint and yet still created and sold the allegedly infringing product are sufficient to establish a plausible entitlement to enhanced damages)).

Taking the allegations in the Complaint as true, Nasdaq has created a sufficient inference of egregiousness to allow its willful infringement claims to proceed past the pleading stage. The Complaint alleges IEX knew of the Patents-in-Suit “years before this Complaint was filed”

because “IEX hired at least four former Nasdaq technology employees familiar with the inventions described in the Patents-in-Suit.” (ECF No. 1 ¶¶ 29-30.) The former employees allegedly *participated in the filing and contributed in the development* of the Patents-in-Suit. (*Id.* ¶¶ 31-36.) Such allegations are sufficient under *Twombly* and *Iqbal*, as they are more than a formulaic pleading. Accordingly, IEX’s Motion to Dismiss Nasdaq’s willful infringement claims is **DENIED**.

#### **E. Whether the Complaint Pleads Infringement by both IEX Defendants**

IEX argues Nasdaq’s Complaint fails to distinguish between IEX Group, Inc. and Investors Exchange, LLC even though they are distinct entities. (ECF No. 23-1 at 37.) Nasdaq argues the Complaint “does refer to both Defendants as ‘IEX’ for convenience, but it also specifically describes the relationship between the two entities, and specifically accuses both entities of infringing acts.” (ECF No. 27 at 24.) Nasdaq argues the “need to sue both entities arose from the fact that IEX Defendants’ shared website and other publicly-available materials are not forthcoming about which entity does what.” (*Id.* at 25.)

“[T]he consistency of the subject of the pleading . . . , despite its group format, means that it can be reasonably inferred that each and every allegation is made against each individual defendant.” *Zond, Inc. v. Fujitsu Semiconductor Ltd.*, 990 F. Supp. 2d 50, 53 (D. Mass. 2014); *see Bilecki v. Mather Inv’rs, LLC*, No. 08-1, 2008 WL 4376372, at \*2 (W.D. Mich. Sept. 22, 2008) (“The Federal Rules of Civil Procedure do not require a plaintiff to make separate statements against each individual defendant.”); *see also Thomas v. Luzerne Cty. Corr. Facility*, 310 F. Supp. 2d 718, 721 (M.D. Pa. 2004). The pervasiveness of this practice is enough to convince the Court that this procedure is proper. Accordingly, IEX’s Motion to Dismiss on this account is **DENIED**.

If discovery establishes only one defendant committed the infringing acts, the other defendant can seek summary judgment on that ground.

#### **IV. CONCLUSION**

For the reasons set forth above, IEX's Motion to Dismiss is **GRANTED without prejudice** as to Nasdaq's induced infringement claims but **DENIED** as to all other claims.

Date: January 4, 2019

/s/ *Brian R. Martinotti*  
**HON. BRIAN R. MARTINOTTI**  
**UNITED STATES DISTRICT JUDGE**